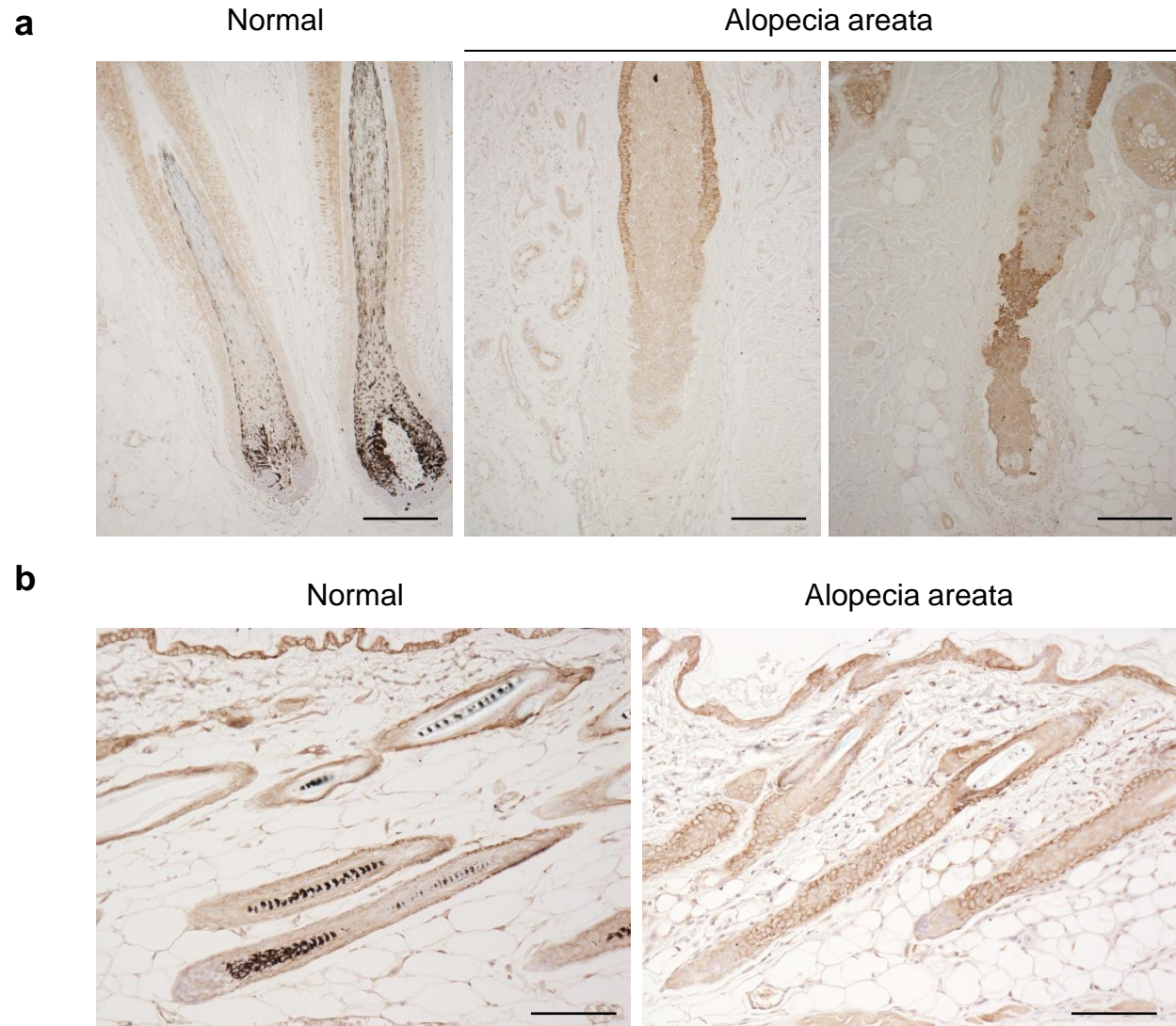


**Double-stranded RNA induces inflammation via the NF- $\kappa$ B pathway and inflammasome activation in the outer root sheath cells of hair follicles**

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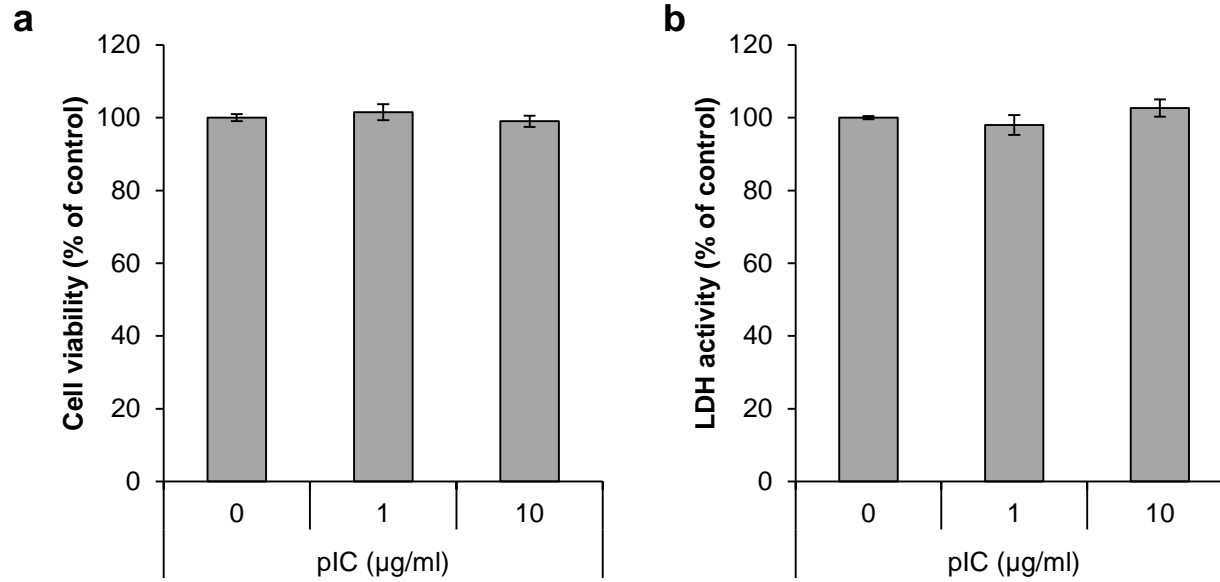
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**Supplementary Figure 1. Expression of Toll-like receptor 3 (TLR3) in normal and alopecia areata-affected scalp tissues.**

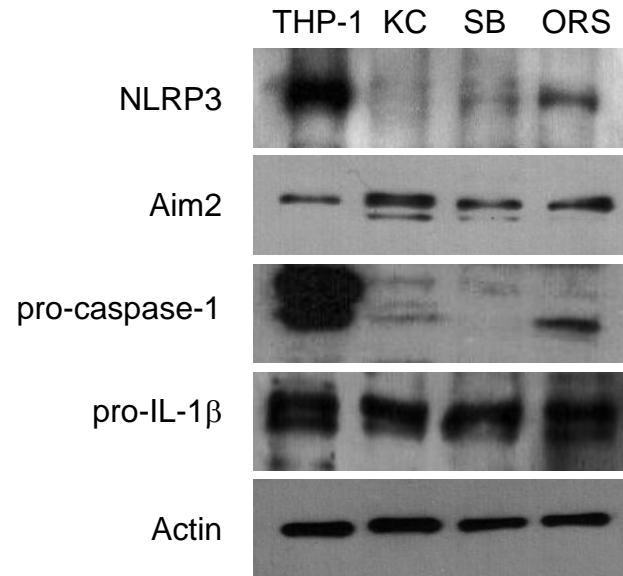
Paraffin-embedded normal scalp skin and alopecia areata lesions were immunohistochemically stained with anti-TLR3. Bars = 100  $\mu$ m.



**Supplementary Figure 2. Effect of poly(I:C) on cell viability in dermal papilla cells**

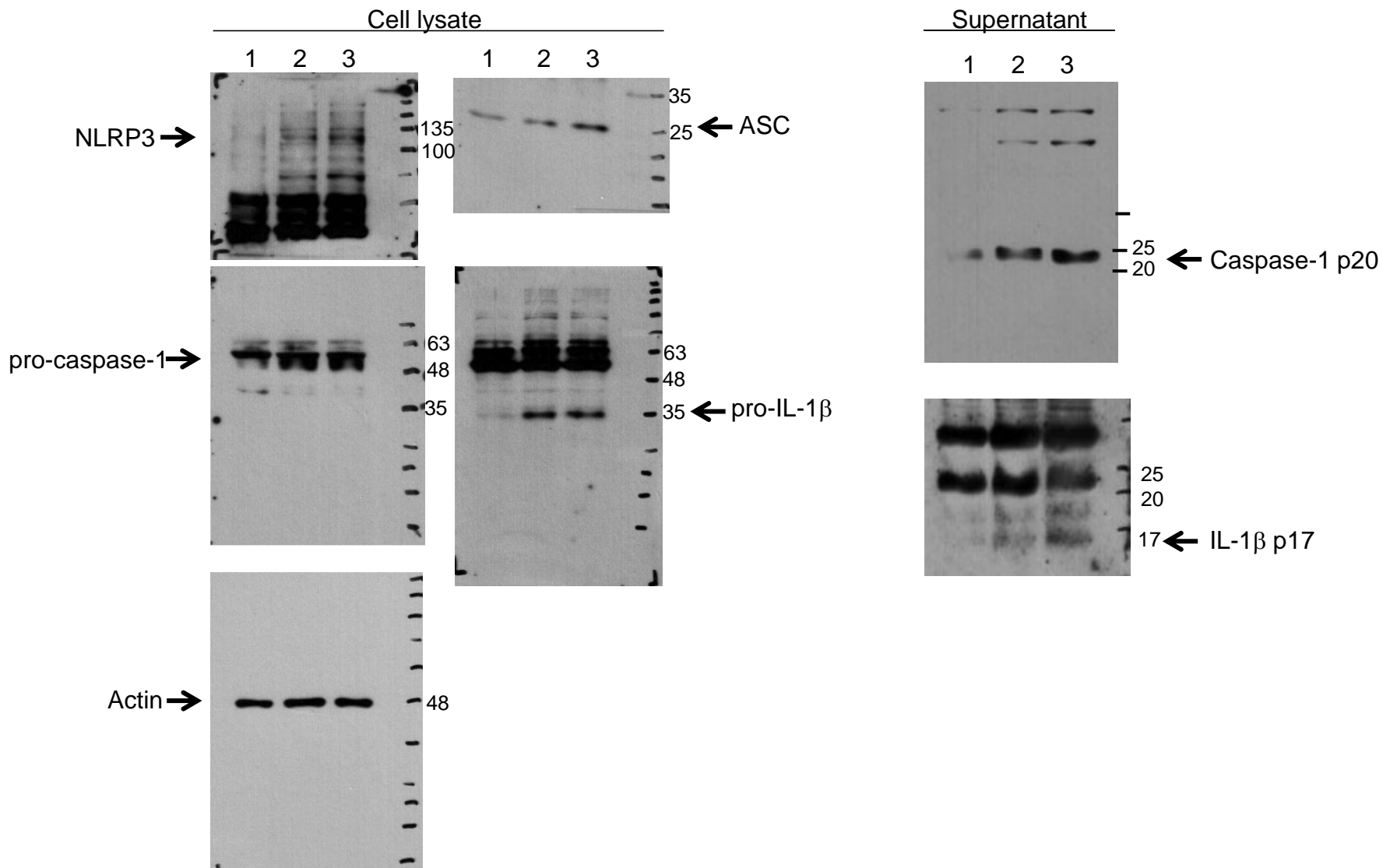
SV40T-transformed human dermal papilla cells (SV-DP) were treated with poly(I:C) at the indicated concentrations for 24 hr.

(a) Cell viability was measured by MTT assay. (b) Pyroptosis was determined by LDH activity.

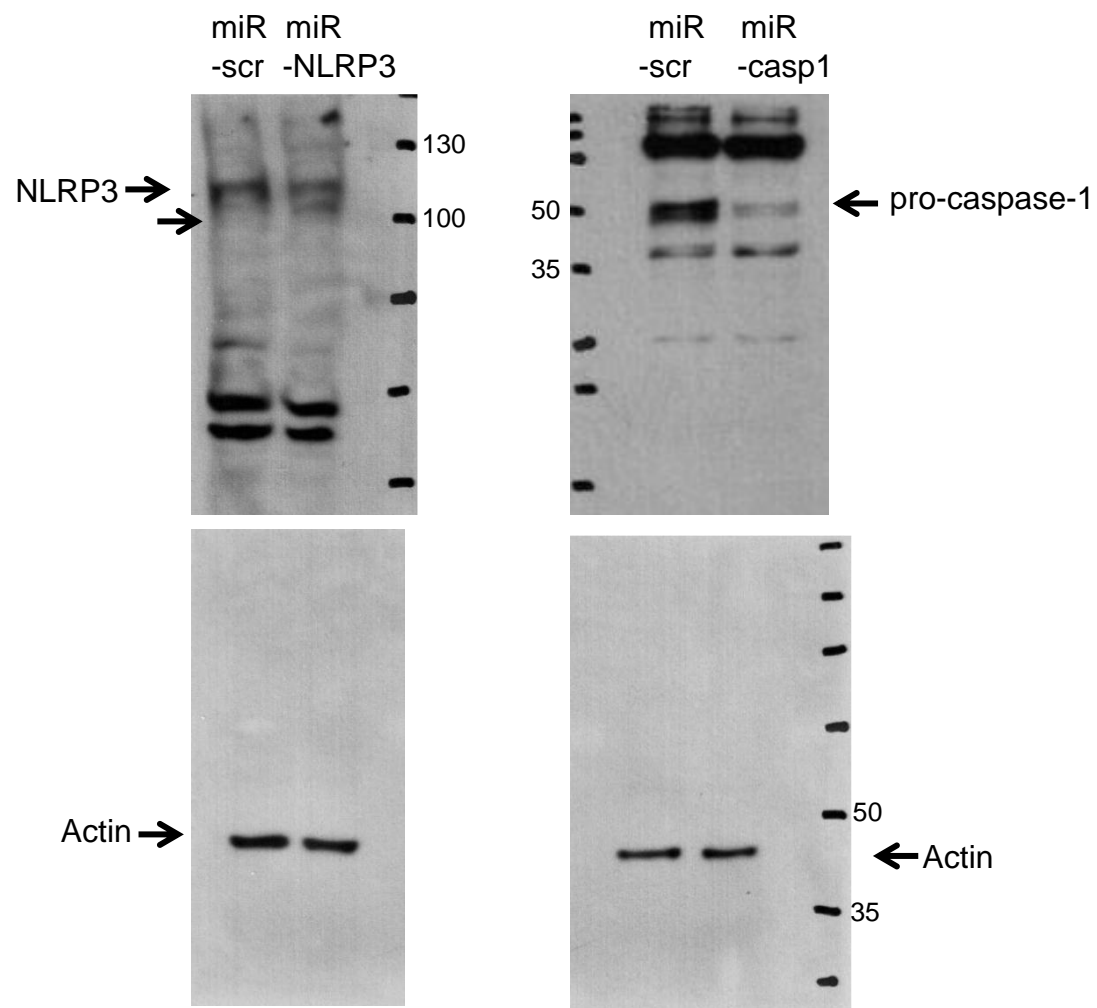


**Supplementary Figure 3. Expression of inflammasome components in skin cells**

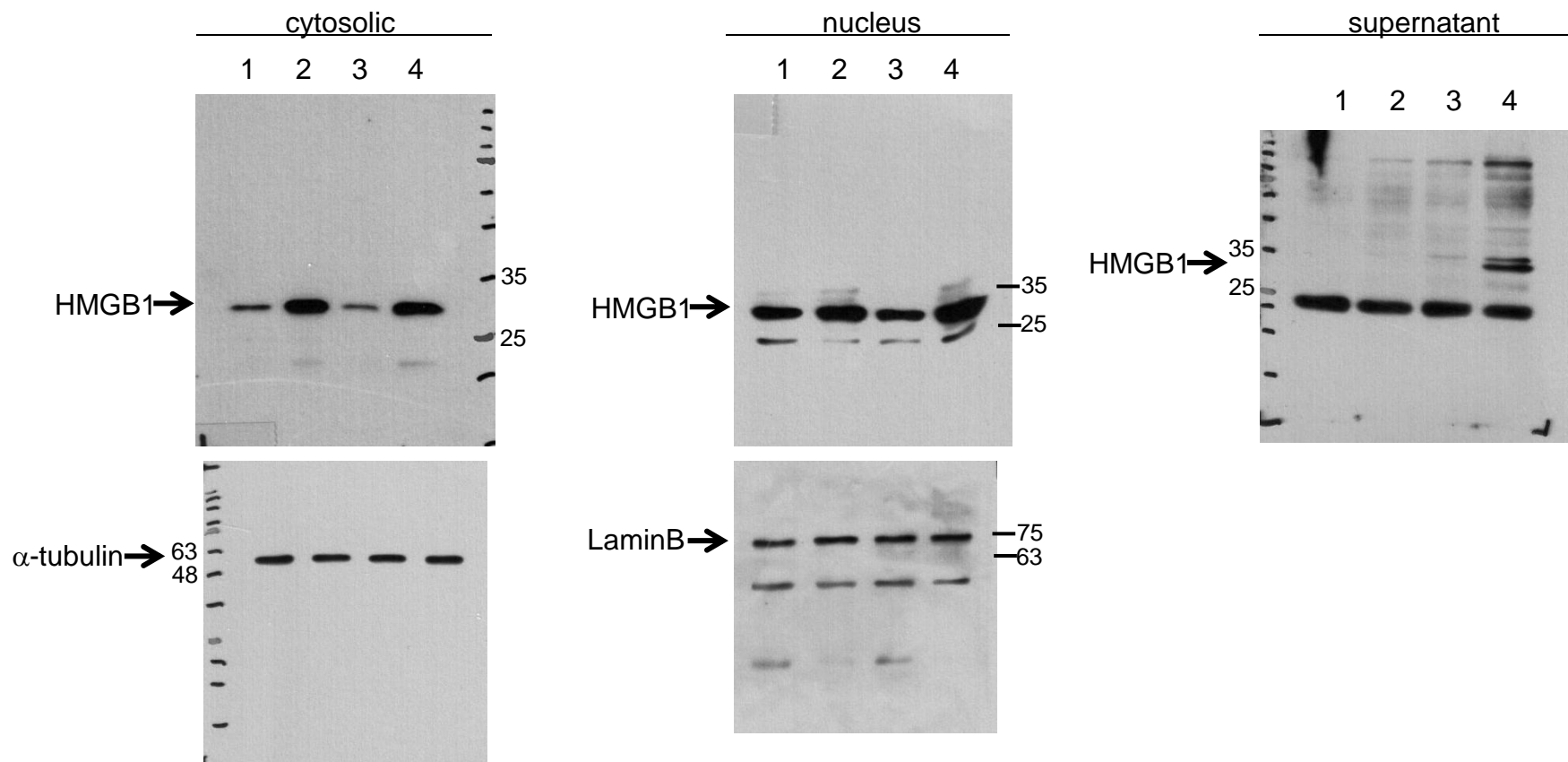
Cell extracts prepared from monocyte-derived THP-1 cell line, normal human epidermal keratinocytes (KC), human sebocytes (SB) and SV40T-transformed human ORS cells (ORS) were assessed by western blotting. Actin was used as a loading control.



**Supplementary Figure 4.** Uncropped data for Figure 2e.



**Supplementary Figure 5.** Uncropped data for Figure 3b.



**Supplementary Figure 6.** Uncropped data for Figure 5a.